

Title (en)
POWER CONVERTER

Title (de)
STROMWANDLER

Title (fr)
CONVERTISSEUR DE PUISSANCE

Publication
EP 3522351 A1 20190807 (EN)

Application
EP 19153348 A 20190123

Priority
JP 2018019601 A 20180206

Abstract (en)
A power converter (10) may include a first (6a, 6c) and second housings (6b, 6d), each of which houses switching elements (41a - 41c) connected in parallel. Each of the first and the second housings may be provided with a first surface (421) and a second surface (422). The first and the second housings may be arranged face to face. In each of the first and the second housings, the switching elements (41a - 41c) may be aligned in an alignment direction which is parallel to both of the first and the second surfaces. An emitter terminal or a source terminal (6n) of parallel connection of the switching elements (41a - 41c) may extend from the second surface (422) at a position equidistant from the switching elements (41a, 41c) positioned at both ends in the alignment direction among the plurality of switching elements (41a - 41c). A collector terminal or a drain terminal (6p) of the parallel connection may be positioned adjacent to the emitter or the source terminal (6n) in the alignment direction.

IPC 8 full level
H02M 7/00 (2006.01); **H01L 25/07** (2006.01); **H01L 25/11** (2006.01); **H02M 1/00** (2006.01); **H02M 3/158** (2006.01); **H02M 7/162** (2006.01)

CPC (source: CN EP KR RU US)
H01L 23/4012 (2013.01 - EP US); **H01L 23/49562** (2013.01 - EP US); **H01L 25/117** (2013.01 - EP US); **H02J 1/00** (2013.01 - RU); **H02M 3/04** (2013.01 - KR); **H02M 3/155** (2013.01 - RU); **H02M 3/158** (2013.01 - EP US); **H02M 3/1584** (2013.01 - US); **H02M 7/003** (2013.01 - CN EP KR RU US); **H02M 7/162** (2013.01 - EP US); **H02M 7/44** (2013.01 - KR); **H01L 2224/04042** (2013.01 - EP US); **H01L 2224/06181** (2013.01 - EP US); **H01L 2224/32245** (2013.01 - EP US); **H01L 2224/33181** (2013.01 - EP US); **H01L 2224/48247** (2013.01 - EP US); **H01L 2224/73215** (2013.01 - EP US); **H01L 2924/13055** (2013.01 - EP US); **H02M 1/007** (2021.05 - EP US); **H02M 3/003** (2021.05 - EP)

Citation (applicant)
JP 2016096620 A 20160526 - TOYOTA MOTOR CORP

Citation (search report)
• [Y] US 2009201708 A1 20090813 - OHKOUCHI YASUYUKI [JP], et al
• [Y] US 2003030481 A1 20030213 - OUMARU TAKESHI [JP]
• [YD] JP 2016096620 A 20160526 - TOYOTA MOTOR CORP

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3522351 A1 20190807; BR 102019001168 A2 20190827; CN 110120751 A 20190813; JP 2019140722 A 20190822; KR 20190095137 A 20190814; RU 2699823 C1 20190911; US 10454375 B2 20191022; US 2019245443 A1 20190808

DOCDB simple family (application)
EP 19153348 A 20190123; BR 102019001168 A 20190122; CN 201910099138 A 20190131; JP 2018019601 A 20180206; KR 20190011851 A 20190130; RU 2019103084 A 20190205; US 201916267624 A 20190205